

CDF Matrix of Salmonid Protection Measures for Discussion at the Board of Forestry and Fire Protection Special Meeting  
August 23, 2006

Table 1 - Watercourse and Lake Protection

Issues	Existing Forest Practice Rules (FPR)	Watersheds with Threatened or Impaired (T&I) Values	2112 Rules Proposal	Science Review Panel (SRP) Report 6/99	Forest Ecosystem Management Assessment Team (FEMAT) - Option 9	Salmon and Steelhead Recovery Coalition Resolution (Aug. 2002)	North Coast RWQCB General WDRs (Order No. R1-2004-030)	North Coast RWQCB Categorical Waiver F (THPs) (Order No. R1-2004-016)	Coho Recovery Strategy (Alternatives B and C)
<b>Class I</b> Watercourse and Lake Protection Zone (WLPZ) width measured from:	Hillslope edge of channel zone* <ul style="list-style-type: none"><li>• 75' for &lt;30% slopes</li><li>• 100' / 30-50%</li><li>• 150' /&gt;50%</li></ul> Widths may be reduced if cable or helicopter system is used	Hillslope edge of channel zone <ul style="list-style-type: none"><li>• 150' minimum</li><li>• No Emergency Notice or Exemption operations allowed w/in the WLPZ</li></ul>	Same as T&I Rules	Hillslope edge of floodplain <ul style="list-style-type: none"><li>• 150' minimum</li><li>• No reductions of width due to use of cable system.</li></ul> The above does not include waters designated Class I <i>solely</i> due to domestic use.	Edge of active channel <ul style="list-style-type: none"><li>• To top of inner gorge, outer edges of 100-year flood plain, outer edge of riparian vegetation, or to distance equal to height of two site potential trees, or 300 feet, whichever is greatest</li></ul>	Hillslope edge of channel zone <ul style="list-style-type: none"><li>• 150' minimum</li></ul>			Same as T&I Rules
<b>Class I</b> WLPZ retention	<ul style="list-style-type: none"><li>• 50% overstory canopy</li><li>• 50% understory canopy</li></ul> Retained overstory canopy must be at least 25% existing overstory conifer  Retention of at least 75% surface cover	From hillslope edge of channel zone: <ul style="list-style-type: none"><li>• 0-75'/85% overstory canopy</li><li>• &gt;75'/65% canopy</li></ul> Retained overstory canopy must be at least 25% existing overstory conifer  Retention of at least 75% surface cover	Includes T& I Rules plus: <ul style="list-style-type: none"><li>• Retention of WLPZ trees providing direct shading to pools.</li><li>• Requirement for retaining 10 largest trees applied to each side of watercourse and extended to 100 feet from watercourse transition line.</li><li>• Deletes option for proposing use of smaller retention trees.</li></ul>	<ul style="list-style-type: none"><li>• 0-75'/85% overstory canopy</li><li>• 75-150'/65% canopy</li></ul>	Removed from timber base, no timber harvest	From hillslope edge of channel zone: <ul style="list-style-type: none"><li>• 0-100'/85% overstory canopy</li><li>• &gt;100'/65% overstory canopy</li></ul> Retained overstory canopy must be at least 25% existing overstory conifer		From transition line: <ul style="list-style-type: none"><li>• 0-75'/85% overstory canopy</li><li>• &gt;75'/65% overstory canopy</li></ul> Retained overstory canopy must be at least 25% existing overstory conifer	Includes T& I Rules provisions plus: <ul style="list-style-type: none"><li>• Retention of WLPZ trees providing direct shading to pools.</li><li>• Requirement for retaining 10 largest trees applied to each side of watercourse and extended to 100 feet from watercourse transition line.</li></ul>
<b>Class I</b> Equipment exclusion	Equipment Exclusion Zone (EEZ) same as WLPZ	Same as existing FPRs	Same as existing FPRs	150' EEZ	Removed from timber base, no timber harvest	Same as existing FPRs		Equipment Exclusion Zone (EEZ) same as WLPZ. Road upgrading to permanent standards is allowed. Sediment Prevention Plan required for ground based yarding or heavy equipment use in WLPZ	Same as existing FPRs
<b>Class II</b> WLPZ width measured from:	Hillslope edge of channel zone <ul style="list-style-type: none"><li>• 50' for &lt;30% slopes</li><li>• 75' for slopes 30-50%</li><li>• 100' for &gt;50% slopes</li></ul>	Hillslope edge of channel zone <ul style="list-style-type: none"><li>• 50' for &lt;30% slopes</li><li>• 75' for slopes 30-50%</li><li>• 100' for &gt;50% slopes</li><li>• No Emergency Notice or Exemption operations allowed w/in the WLPZ.</li></ul>	Same as T&I Rules	Hillslope edge of floodplain with 100' minimum	For permanently flowing nonfish-bearing streams, edge of active stream channel to greater of: <ul style="list-style-type: none"><li>• top of inner gorge</li><li>• outer edge of 100-year floodplain</li><li>• outer edges of riparian vegetation</li><li>• distance of one site potential tree</li><li>• 150 feet</li></ul>	hillslope edge of channel zone			For ephemeral Class II watercourses -- hillslope edge of channel zone <ul style="list-style-type: none"><li>• 50' for &lt;30% slopes</li><li>• 75' for slopes 30-50%</li><li>• 100' for &gt;50% slopes</li></ul> No Emergency Notice or Exemption operations allowed w/in the WLPZ.  For intermittent or perennial, see below.
<b>Class II</b>	50% total canopy	Same as existing FPRs	For mapped tributaries to Class I	0-30'/85% overstory canopy	Removed from timber base, no	From hillslope edge of channel		75 % overstory canopy retention	For intermittent or perennial

\* Channel Zone: for confined channel – to hillslope edge of 20-year floodplain or for unconfined channel – to hillslope edge of active channel (25-year established riparian vegetation)

CDF Matrix of Salmonid Protection Measures for Discussion at the Board of Forestry and Fire Protection Special Meeting  
August 23, 2006

Issues	Existing Forest Practice Rules (FPR)	Watersheds with Threatened or Impaired (T&I) Values	2112 Rules Proposal	Science Review Panel (SRP) Report 6/99	Forest Ecosystem Management Assessment Team (FEMAT) - Option 9	Salmon and Steelhead Recovery Coalition Resolution (Aug. 2002)	North Coast RWQCB General WDRs (Order No. R1-2004-030)	North Coast RWQCB Categorical Waiver F (THPs) (Order No. R1-2004-016)	Coho Recovery Strategy (Alternatives B and C)
WLPZ retention	Retained overstory canopy must be at least 25% existing overstory conifer  Retention of at least 75% surface cover		with listed anadromous salmonids: <ul style="list-style-type: none"><li>• Inner band from 0-50’ with &gt;85% canopy and &gt;25% conifer overstory.</li><li>• Outer band with &gt;65% canopy and &gt;25% conifer overstory:</li><li>• 50 to 75’ on 0-30% slope.</li><li>• 50 to 100’ on 30-50% slope.</li><li>• 50 to 125’ on &gt;50% slope.</li></ul>	30-100’/65% canopy	timber harvest.	zone: <ul style="list-style-type: none"><li>• 0-50’/85% overstory canopy</li><li>• additional outer zone: 65% overstory canopy</li><li>• additional outer zone =</li><li>• 25’ for &lt;30% slopes</li><li>• 50’ for slopes 30-50%</li><li>• 75’ for &gt;50% slopes</li></ul> Retained overstory canopy must be at least 25% existing overstory conifer		in watersheds with a 303(d) listing for water temperature.  The overstory canopy must be composed of at least 25% overstory conifer canopy post-harvest	tributary to Class I which are mapped on USGS topo maps and are tributary to Class Is with coho: <ul style="list-style-type: none"><li>• Inner band from 0-50’ with &gt;85% canopy and &gt;25% conifer overstory.</li><li>• Outer band with &gt;65% canopy and &gt;25% conifer overstory:</li><li>• 50 to 75’ on 0-30% slope.</li><li>• 50 to 100’ on 31-50% slope</li><li>• 50 to 125’ on &gt; 50% slope.</li></ul>
<b>Class II</b> Equipment exclusion	EEZ same as WLPZ, exception if explained & justified	Same as existing FPRs	Same as existing FPRs	100’ EEZ	Removed from timber base, no timber harvest	Equipment Exclusion Zone (EEZ) same as WLPZ		Equipment Exclusion Zone (EEZ) same as WLPZ. Road upgrading to permanent standards is allowed. Sediment Prevention Plan required for ground based yarding or heavy equipment use in WLPZ	Same as existing FPRs
<b>Class III</b> WLPZ, EEZ, or ELZ width measured from:	Hillslope edge of channel zone.  WLPZ established at Registered Professional Forester (RPF) discretion	Same as existing FPRs	Same as existing FPRs	Hillslope edge of floodplain <ul style="list-style-type: none"><li>• 30-50’ EEZ</li><li>• Minimize burning</li><li>• Retain woody material</li></ul>	Edge of definable channel with evidence of annual scour or deposition, includes: <ul style="list-style-type: none"><li>• extent of unstable and potentially unstable areas</li><li>• top of inner gorge distance equal to ½ site potential tree height or 50 feet, whichever is greatest</li></ul>			No timber harvest activities within the channel zone of a Class III watercourse, except for use and maintenance of roads and crossings.	For Class III adjacent to harvest units where evenaged management is proposed: <ul style="list-style-type: none"><li>• 25’ WLPZ on each side for slopes ≤ 30%</li><li>• 50’ WLPZ on each side for slopes &gt;30%</li></ul>
<b>Class III</b> Canopy retention	No canopy retention required	Same as existing FPRs	For Class III adjacent to evenaged, rehabilitation, or variable retention harvesting units, retain: <ul style="list-style-type: none"><li>• All trees within or on channel zone boundary.</li><li>• Within ELZ:</li><li>• 50% of understory vegetation.</li><li>• All snags, LWD, and countable trees &lt;10” dbh.</li><li>• No ignition in ELZ</li><li>• At least 15 sq. ft. basal area of hardwoods where this exists before harvesting.</li></ul>	retain all hardwoods w/in EEZ	No harvest	Within Protection Zone: <ul style="list-style-type: none"><li>• retain 50% understory vegetation</li><li>• retain all regeneration conifers, snags, large woody debris</li><li>• no burning initiated</li></ul> Protection Zone = <ul style="list-style-type: none"><li>• 25’ for &lt;30% slopes</li><li>• 50’ for &gt;30% slopes</li></ul> Within Channel Zone <sup>†</sup> : <ul style="list-style-type: none"><li>• retain all trees and overlapping trees on edge</li></ul>		No timber harvest activities within the channel zone of a Class III.	For Class III adjacent to evenaged management is proposed, retain: <ul style="list-style-type: none"><li>• All trees within or on channel zone boundary.</li><li>• Within WLPZ:<ul style="list-style-type: none"><li>• 50% of understory vegetation.</li><li>• All snags, LWD, and countable trees &lt;10” dbh.</li><li>• No burning for site preparation</li></ul></li><li>• Logs may be transported by cable logging.</li></ul>
<b>Class III</b> Equipment exclusion	ELZ required: <ul style="list-style-type: none"><li>• at least 25’ for &lt;30% slopes</li><li>• at least 50’ for &gt;30% slopes</li></ul>	Same as existing FPRs	Same as existing FPRs plus the following: <ul style="list-style-type: none"><li>• Logs may be transported by cable logging.</li><li>• Tractor yarding is prohibited except for use of feller-bunchers and shovel yarding.</li></ul>	30-50’ EEZ	No harvest	Commercial timber operations will be allowed to “yard through” a Class III riparian management zone.		No timber harvest activities within the channel zone of a Class III watercourse, except for use and maintenance of roads and crossings.	For units without evenaged management, ELZ required: <ul style="list-style-type: none"><li>• at least 25’ for &lt;30% slopes</li><li>• at least 50’ for &gt;30% slopes</li></ul>
<b>Watercourse</b>			DFG concurrence required for			During PHIs:			

<sup>†</sup> Channel Zone: Bank-full channel.

CDF Matrix of Salmonid Protection Measures for Discussion at the Board of Forestry and Fire Protection Special Meeting  
August 23, 2006

Issues	Existing Forest Practice Rules (FPR)	Watersheds with Threatened or Impaired (T&I) Values	2112 Rules Proposal	Science Review Panel (SRP) Report 6/99	Forest Ecosystem Management Assessment Team (FEMAT) - Option 9	Salmon and Steelhead Recovery Coalition Resolution (Aug. 2002)	North Coast RWQCB General WDRs (Order No. R1-2004-030)	North Coast RWQCB Categorical Waiver F (THPs) (Order No. R1-2004-016)	Coho Recovery Strategy (Alternatives B and C)
<u>Classification and Mitigation by DFG</u>			approval of exceptions to Class III ELZ requirements.			<ul style="list-style-type: none"><li>• DFG shall place a high priority on watercourse classification.</li><li>• DFG shall place a high priority on identification and remediation of road related sources of sediment likely to recruit into watercourses.</li></ul>			

CDF Matrix of Salmonid Protection Measures for Discussion at the Board of Forestry and Fire Protection Special Meeting  
August 23, 2006

Table 2 - Large Woody Debris (LWD)

Issues	Existing Forest Practice Rules (FPR)	Watersheds with Threatened or Impaired (T&I) Values	2112 Rules Proposal	WPRC Science Panel Report 6/15/99	Forest Ecosystem Management Assessment Team (FEMAT) - Option 9	Salmon and Steelhead Recovery Coalition Resolution (Aug. 2002)	North Coast RWQCB General WDRs (Order No. R1-2004-030)	North Coast RWQCB Categorical Waiver F (THPs) (Order No. R1-2004-016)	Coho Recovery Strategy (Alternatives B and C)
<b><u>Recruitment</u></b>	2 living conifers/acre >16” dbh and 50’ tall w/in 50’ of Class I & II watercourses	Class I & II - no harvest in channel zone  Class III – no harvest in channel zone where protection of Coho is needed  Class I - retention of 10 largest diameter conifers (live or dead) / 330 feet of stream channel w/in 50 ft. of transition line and retention of downed LWD w/in 25-50’ SOZ above evenaged regeneration units  Class III - retain hardwoods and minimize burning	Class I , II & III - no harvest in channel zone  Class I - retention of 10 largest diameter conifers (live or dead) / 330 feet of stream channel w/in 100 ft. of transition line and retention of downed LWD w/in 25-50’ SOZ above evenaged regeneration units  Class III – Retain all trees within or on channel zone boundary; retain hardwoods and minimize burning	Class I & II - no harvest in channel (to hillslope edge of flood plain) <ul style="list-style-type: none"><li>Class I - permanent retention of 10 of the largest diameter trees/100 meters of stream channel w/in 50 ft. of transition line, no salvage of dead, dying or down trees.</li><li>Class II - No salvage w/in Zone A (1<sup>st</sup> 30’)</li><li>Class III - retain hardwoods and minimize burning</li></ul>	No harvest zones in Riparian Reserves  Salvage allowed only if required to attain Aquatic Conservation Strategy Objectives	Class I - retention of 10 largest diameter conifers (live or dead) / 330 feet of stream channel on each side of watercourse w/in 50 ft. of transition line  Class II - retention of 5 largest diameter conifers (live or dead) / 300 feet of stream channel on each side of watercourse w/in 50 ft. of transition line  Class III - retain all trees w/in channel zone and retain all regeneration conifers, snags, and LWD w/in protection zone			Same as T&I Rules
<b><u>Instream LWD</u></b>		No harvest w/in the stream channel	Same as T&I Rules plus the following: <ul style="list-style-type: none"><li>Requirement for retaining 10 largest trees applied to each side of watercourse and extended to 100 feet from watercourse transition line.</li></ul>	No harvest dead, dying or down w/in the stream channel (including flood plain)	No harvest zones in Riparian Reserves  Salvage allowed only if required to attain Aquatic Conservation Strategy Objectives				Same as T&I Rules
<b><u>Salvage Logging</u></b>	Class I and II WLPZ, if <50% canopy only salvage logging allowed	No salvage logging is allowed in a WLPZ without written concurrence from DFG or an approved HCP with NMFS and SYP or approved plan that contains a section that sets forth objectives, goals, and measurable results for streamside salvage operations.	No salvage logging is allowed in a WLPZ.	Class I - No salvage logging w/in 75’ of floodplain  Class II - No salvage logging w/in 30’	No harvest zones in Riparian Reserves  Salvage allowed only if required to attain Aquatic Conservation Strategy Objectives	Class II - no salvage in WLPZ  No salvage logging without written concurrence of DFG or provided for in an HCP			Same as T&I Rules

Table 3 - Roads, Landings, and Skid Trails

Issues	Existing Forest Practice Rules (FPR)	Watersheds with Threatened or Impaired (T&I) Values	2112 Rules Proposal	WPRC Science Panel Report 6/15/99	Forest Ecosystem Management Assessment Team (FEMAT) - Option 9	Salmon and Steelhead Recovery Coalition Resolution (Aug. 2002)	North Coast RWQCB General WDRs (Order No. R1-2004-030)	North Coast RWQCB Categorical Waiver F (THPs) (Order No. R1-2004-016)	Coho Recovery Strategy (Alternatives B and C)
<u>Maintenance Requirements</u>	Maintenance period minimum of 1 year, may be extended to 3 years by Director following work completion report.	The erosion control maintenance period on permanent and seasonal roads and associated landings that are not abandoned in accordance with 14 CCR 923.8 shall be three years.	<ul style="list-style-type: none"><li>• Same as for Road Construction, below.</li><li>• During road inspection and maintenance, measures will be employed to ensure:</li><li>• Waterbars fully capture run-off from road surfaces and discharge it without gully formation or sediment delivery to waters.</li><li>• Culverts (including cross-drains) are not occluded by debris.</li><li>• Inboard ditches are not downcutting or scouring.</li><li>• Cutbank erosion is minimized.</li><li>• Fine sediment present on road surfaces is prevented from delivery to Class I, II, or III waters.</li><li>• Routine corrective work that prevents water diversion from a watercourse or ditch or that helps maintain a stable road or landing surface will be performed as soon as stable operating surfaces are present, regardless of time of year.</li><li>• Lower priority maintenance will be undertaken between June 1 and October 15.</li><li>• Grading of road surfaces will occur only when necessary to achieve a uniform, stable, and well-drained operating surface.</li><li>• Inboard ditches will be graded only when they are blocked or lack adequate hydraulic capacity, or driver safety is a concern. Where feasible, blading the segment of ditch between the watercourse and first drainage facility will be avoided.</li></ul>	<ul style="list-style-type: none"><li>• No blading for winter period use</li><li>• All permanent roads maintained throughout useful life</li><li>• Due to inadequacy of maintenance period, increase abandonment of roads</li><li>• Remove and stabilize all roads in WLPZ that generate or may generate, sediment</li></ul>	<ul style="list-style-type: none"><li>• During and post-storm inspection and maintenance</li><li>• Identify and correct road drainage problems</li><li>• Regulate traffic during wet periods to prevent damage to riparian resources</li><li>• Develop Road Management Objective for each road</li></ul>		Erosion Control Plan (ECP), including: <ul style="list-style-type: none"><li>• An inventory of all controllable sediment discharge sources within the Project Area, and ,</li><li>• A time schedule, which must be during coverage under General WDRs, for implementation of prevention and minimization management measures.</li></ul>	Recommendations and mitigations measures proposed by NCRWQCB staff during the Project review and approval process are incorporated into the approved Project document.  Sediment Prevention Plans, where applicable, shall incorporate NCRWQCB staff recommendations generated as part of the Project review and approval process that were designed to prevent and minimize discharge or waste.	Same as T&I Rules

CDF Matrix of Salmonid Protection Measures for Discussion at the Board of Forestry and Fire Protection Special Meeting  
August 23, 2006

Issues	Existing Forest Practice Rules (FPR)	Watersheds with Threatened or Impaired (T&I) Values	2112 Rules Proposal	WPRC Science Panel Report 6/15/99	Forest Ecosystem Management Assessment Team (FEMAT) - Option 9	Salmon and Steelhead Recovery Coalition Resolution (Aug. 2002)	North Coast RWQCB General WDRs (Order No. R1-2004-030)	North Coast RWQCB Categorical Waiver F (THPs) (Order No. R1-2004-016)	Coho Recovery Strategy (Alternatives B and C)
<u>Crossing Standards</u>	<ul style="list-style-type: none"><li>• Design for 100-year event</li><li>• No blockage of any aquatic migratory routes for anadromous salmonids or listed species</li><li>• A description of all existing permanent crossings of Class I waters by logging roads and specification, giving special attention to allowing fish to pass both upstream and downstream during all life stages</li><li>• New permanent culverts on Class I watercourses must provide the natural movement of bedload to form a stable bed inside the culvert</li><li>• Constructed to minimize diversion potential</li></ul>	<ul style="list-style-type: none"><li>• Design for 100-year event</li><li>• No blockage of any aquatic migratory routes for anadromous salmonids or listed species</li><li>• A description of all existing permanent crossings of Class I waters by logging roads and specification, giving special attention to allowing fish to pass both upstream and downstream during all life stages</li><li>• New permanent culverts on Class I watercourses must provide the natural movement of bedload to form a stable bed inside the culvert</li><li>• Constructed to minimize diversion potential</li></ul>	<ul style="list-style-type: none"><li>• Crossing standards apply to construction, reconstruction, and maintenance.</li><li>• Crossings and associated fills to be removed where there is evidence of failure potential or sediment delivery to Class I, II, or III waters.</li><li>• Culverts to be replaced or removed if they are crushed, perforated, piping, separated, under-sized, located in unstable fill, or causing erosion that may be expected to deliver sediment to Class I, II, or III waters.</li><li>• Replaced culverts to be installed at or as close as possible to original stream grade and slope.</li><li>• Approaches to temporary crossings shall be rocked as needed after removal to prevent rutting or pumping of fines by light vehicles.</li><li>• Bridges (including associated fill, rip rap, and abutments) and bridge approaches showing evidence of failure potential or sediment delivery to Class I, II, or III waters will be repaired, replaced, or removed.</li></ul>	<ul style="list-style-type: none"><li>• Design for 100 year event</li><li>• All new and replaced Class I crossings must have natural bottom</li><li>• No more than 100’ of inside ditch to drain into a watercourse crossing</li><li>• Remove all drainage structures in a road abandonment</li></ul>	<ul style="list-style-type: none"><li>• Design for 100-year flood event</li><li>• Construct and maintain to prevent diversion potential</li><li>• Provide for fish passage at all crossings of existing and potential fish-bearing streams</li></ul>	<ul style="list-style-type: none"><li>• Class I, II, and III designed for 100 year event including debris and sediment</li><li>• All new Class I crossings must span watercourse or have culvert with natural bottom</li><li>• All permanent Class II and III crossings shall be placed in the bottom of natural channel and capture low flows</li></ul> <p>No proposed crossing or alteration under DFG permit may have a substantial adverse impact on Coho or Coho habitat.</p> <p>DFG permits shall provide necessary fish passage bypass flows and erosion prevention.</p> <p>All mitigation measures identified by DFG for Coho protection shall be fully implemented.</p> <p>DFG shall prioritize staff to ensure enforcement of permits.</p>	Erosion Control Plan (ECP) including an inventory and an implementation schedule, as above.	.Recommendations and mitigations measures proposed by NCRWQCB staff during the Project review and approval process are incorporated into the approved Project document.	Same as T&I Rules
<u>Construction Standards</u>	<ul style="list-style-type: none"><li>• Where feasible, planned and located to avoid unstable areas</li><li>• Planned to stay out of WLPZ except crossings</li><li>• THP include measures to minimize erosion when on slopes &gt;65% or &gt;50% when w/in 100’ of WLPZ</li><li>• Not to exceed 15% except for pitches of 20% for up to 500’</li><li>• Planned to single lane compatible with equipment to be used in harvest</li></ul>	<ul style="list-style-type: none"><li>• THPs must minimize long-term site occupancy of transportation system</li><li>• Roads no wider than single lane with turnouts</li><li>• On slopes greater than 50%:</li><li>• Specific provisions of construction shall be identified and described for all new roads.</li><li>• Where cutbank stability is not an issue, roads may be constructed as a full-benched cut (no fill).</li><li>• Spoils not utilized in road construction shall be disposed of in stable areas with less than 30 percent slope and outside of any WLPZ, EEZ, or ELZ.</li><li>• Alternatively, roads may be constructed with balanced cuts and fills if properly engineered, or fills may be removed with the slopes recontoured prior to the winter period.</li></ul>	<ul style="list-style-type: none"><li>• Construction standards also apply to reconstruction and maintenance, except that maintenance work may continue between October 15 and June 1.</li><li>• No road or landing construction, reconstruction, or decommissioning will be undertaken between October 15<sup>th</sup> to June 1<sup>st</sup>, or at any time outside this period when saturated soil conditions exist.</li><li>• Road surfaces outsloped with rolling dips, where feasible.</li><li>• Road segments hydrologically disconnected by outsloping, rocking, rolling dips, cross drains, and/or waterbars.</li><li>• Drainage directed to stable and functional filter strips.</li><li>• Between nearest drainage facilities on both sides of a crossing:</li><li>• Permanent roads, seasonal</li></ul>	<ul style="list-style-type: none"><li>• Develop a threshold density for road networks</li><li>• Limit to slopes &lt; 65% unless approved by CEG</li><li>• Minimum cross drain of 18” diameter culvert</li></ul>	<ul style="list-style-type: none"><li>• Minimize locations w/in Riparian Reserve</li><li>• Complete Watershed Analysis prior to construction w/in Riparian Reserves</li><li>• Restrict sidecast as necessary to prevent the introduction of sediment to streams</li><li>• Minimize disruption of natural hydrologic flow paths</li></ul>		Erosion Control Plan (ECP) including an inventory and an implementation schedule, as above.	New road construction is limited to 100 linear feet, unless explained and justified in a Sediment Prevention Plan.	In addition to the T&I Rules:  Construction, reconstruction, upgrades, maintenance and operation of roads within and appurtenant to THPs, detailed site specific recommendations are to be developed consistent with the Handbook for Forest and Ranch Roads (PWA 1994).
<u>Construction</u>									

CDF Matrix of Salmonid Protection Measures for Discussion at the Board of Forestry and Fire Protection Special Meeting  
August 23, 2006

Issues	Existing Forest Practice Rules (FPR)	Watersheds with Threatened or Impaired (T&I) Values	2112 Rules Proposal	WPRC Science Panel Report 6/15/99	Forest Ecosystem Management Assessment Team (FEMAT) - Option 9	Salmon and Steelhead Recovery Coalition Resolution (Aug. 2002)	North Coast RWQCB General WDRs (Order No. R1-2004-030)	North Coast RWQCB Categorical Waiver F (THPs) (Order No. R1-2004-016)	Coho Recovery Strategy (Alternatives B and C)
<b>Standards</b> (Continued)		<ul style="list-style-type: none"><li>• All permanent or seasonal logging roads with a grade of 15% or greater that extends 500 continuous feet or more shall have specific erosion control measures stated in the plan.</li><li>• Where road networks are remote, the landscape is unstable, water conveyance features historically have a high failure rate, culvert fills are large; drainage structures and erosion control features shall be oversized, low maintenance, or reinforced, or removed before the completion of the timber operation.</li></ul>	<p>crossings of Class I watercourses, and roads used for hauling shall be treated with high-quality, durable rock to a minimum, compacted depth of 6 inches or with paving.</p> <ul style="list-style-type: none"><li>• Other seasonal roads used for current year hauling or used between October 15 to June 1 for other purposes shall be treated to prevent erosion.</li><li>• Along roads listed above, ditches exhibiting down-cutting shall be lined with high quality, durable rock.</li><li>• Sediment discharge from unstable or eroding cutbanks, fillslopes, and landing fills shall be prevented by pulling, buttressing, or other means and by installing and maintaining effective erosion control materials.</li></ul>						
<b>WLPZ Roads</b>	Prohibited in Class I, II, and III watercourses except: <ul style="list-style-type: none"><li>• At prepared tractor and road crossings.</li><li>• At crossings of Class III watercourses that are dry.</li><li>• At existing crossings.</li><li>• At new crossings approved by DFG 1600 permit process.</li><li>• As explained and justified in the plan and approved by the Director.</li></ul>		<ul style="list-style-type: none"><li>• Prior to use for hauling, all roads in Class I WLPZs shall be surfaced with high quality, durable rock surfacing compacted to a minimum depth of 6 inches or with paving.</li><li>• The surface of roads used for hauling in Class I WLPZs shall be maintained to avoid rutting or pumping of fines during use.</li></ul>						
<b>Road Use in Close Proximity to Watercourse</b>								No hauling on roads within WLPZ except on existing permanent roads or on existing seasonal roads unless the Project contains a Sediment Prevention Plan.	
<b>Skid trails on Steep Slopes or in Close Proximity to Watercourse</b>	No tractor operations on slopes >50% that lead without flattening to a watercourse	<p>During winter period, no skid trails on slopes &gt; 40% w/in 200 feet of Class I, II, or III watercourse</p> <p>Road use limited to those with permanent stable surface throughout period of use</p>	<p>During winter period, no skid trails on slopes &gt; 40% w/in 200 feet of Class I, II, or III watercourse</p> <p>Road use limited to those with permanent stable operating surface throughout period of use</p>				Erosion Control Plan (ECP) including an inventory and an implementation schedule, as above.	Ground based heavy equipment operations on slopes greater than 50% are prohibited unless the Project contains a Sediment Prevention Plan. No construction of new skid trails on slopes over 40% within 200 feet of a watercourse unless the project contains a Sediment Prevention Plan.	Same as T&I Rules
<b>Wet Weather Construction and</b>	<ul style="list-style-type: none"><li>• No road construction under saturated soil conditions.</li></ul>	<ul style="list-style-type: none"><li>• From October 15 to May 1, no timber operations unless the</li></ul>	<ul style="list-style-type: none"><li>• Use of unpaved roads will cease when precipitation is sufficient</li></ul>	<ul style="list-style-type: none"><li>• No road or landing construction during winter period</li></ul>		No use of unpaved road segments when:	Erosion Control Plan (ECP) including an inventory and an	No log hauling, ground based yarding , road construction, road	Same as T&I Rules

CDF Matrix of Salmonid Protection Measures for Discussion at the Board of Forestry and Fire Protection Special Meeting  
August 23, 2006

Issues	Existing Forest Practice Rules (FPR)	Watersheds with Threatened or Impaired (T&I) Values	2112 Rules Proposal	WPRC Science Panel Report 6/15/99	Forest Ecosystem Management Assessment Team (FEMAT) - Option 9	Salmon and Steelhead Recovery Coalition Resolution (Aug. 2002)	North Coast RWQCB General WDRs (Order No. R1-2004-030)	North Coast RWQCB Categorical Waiver F (THPs) (Order No. R1-2004-016)	Coho Recovery Strategy (Alternatives B and C)
<u>Use</u>	<ul style="list-style-type: none"><li>• Winter period operating plan required for tractor operations.</li><li>• Where necessary, surface roads with rock to maintain a stable road surface</li></ul>	<p>plan incorporates a winter period operating plan</p> <ul style="list-style-type: none"><li>• No skid trails constructed, reconstructed, or used on slopes &gt;40% and w/in 200 feet of a Class I, II, or III stream, as measured from the active channel or bankfull stage, whichever is wider</li><li>• Operation on roads and landings shall be limited to those with a permanent stable operating surface throughout the period of use.</li><li>• Roads with 20% grade for 500’ surfaced with rock</li><li>• Limitations on blading during winter period use</li><li>• No construction, reconstruction, or use of where saturated soil conditions exist, where a stable logging road or landing operating surface does not exist, or when visibly turbid water from the road, landing, or skid trail surface or inside ditch may reach a watercourse or lake.</li><li>• Tractor roads have drainage and/or drainage collection and storage facilities installed prior to the start of any rain which causes overland flow across the disturbed surface or any day with a National Weather Service forecast of a chance of rain of 30 percent or more, a flash flood warning or watch</li></ul>	<p>to generate overland flow off the road surface or rutting of the road surface occurs.</p> <ul style="list-style-type: none"><li>• Resumption of road use, road or landing construction or reconstruction, or decommissioning activities shall not occur until a stable operating surface can be developed or maintained.</li></ul>	<ul style="list-style-type: none"><li>• No blading during winter period use</li><li>• Roads with 20% grade for 500’ should be completely rocked</li><li>• Consider additional stabilization for roads with WLPZs</li></ul>		<ul style="list-style-type: none"><li>• precipitation is sufficient to generate overland flow off the road surface; or</li><li>• use of any portion of the road results in rutting of the road surface.</li></ul> <p>Road use shall not resume until the road is dry.</p> <ul style="list-style-type: none"><li>• Dry = road surface is well drained and not rutting, discharging fine sediments, or causing a visible turbidity increase in a ditch or on a road surface that drains into a Class I, II or III watercourse.</li></ul> <p>Access allowed for road inspection and emergencies by vehicles rated one ton or less.</p>	implementation schedule, as above.	reconstruction, or road rocking during the winter period (November 15 to April 1). This measure does not apply to erosion control maintenance of existing roads and watercourse crossings, timber falling, or use of cable or helicopter yarding methods.	
<u>Winter Period Construction</u>	No road construction under saturated soil conditions.	No road construction or reconstruction during winter period	No road construction or reconstruction during winter period	No road construction during the winter period, reconstruction must be complete by October 15			Erosion Control Plan (ECP) including an inventory and an implementation schedule, as above.		Same as T&I Rules
<u>Erosion Control Materials</u>  <u>Erosion Control Materials</u>	<p>Stabilization reqired for:</p> <ul style="list-style-type: none"><li>• Bare mineral soil areas larger than 800 square feet within Class I and II WLPZs.</li><li>• Bare mineral soil exposed by timber operations on approaches to watercourse crossings in Class I, II, and III WLPZs and ELZs</li><li>• Where necessary to protect beneficial uses of water</li></ul>		Erosion control materials shall be applied in sufficient quantity prior to the onset of measurable precipitation with re-application as needed to avoid any visible increase in turbidity in Class I, II, or III receiving waters.						



CDF Matrix of Salmonid Protection Measures for Discussion at the Board of Forestry and Fire Protection Special Meeting  
August 23, 2006

[illegible]

CDF Matrix of Salmonid Protection Measures for Discussion at the Board of Forestry and Fire Protection Special Meeting  
August 23, 2006

Issues	Existing Forest Practice Rules (FPR)	Watersheds with Threatened or Impaired (T&I) Values	2112 Rules Proposal	WPRC Science Panel Report 6/15/99	Forest Ecosystem Management Assessment Team (FEMAT) - Option 9	Salmon and Steelhead Recovery Coalition Resolution (Aug. 2002)	North Coast RWQCB General WDRs (Order No. R1-2004-030)	North Coast RWQCB Categorical Waiver F (THPs) (Order No. R1-2004-016)	Coho Recovery Strategy (Alternatives B and C)
			waterbars, or rolling dips will be installed to reduce discharge volume to the site.						
<b><u>Decommissioning</u></b>	<p>Abandonment of roads and crossings shall be done in a manner that:</p> <ul style="list-style-type: none"><li>• Provides for permanent, maintenance free drainage.</li><li>• Minimizes concentration of runoff, soil erosion, and slope instability.</li><li>• Prevents unnecessary damage to soil resources</li><li>• Promotes regeneration.</li><li>• Protects the quality and beneficial uses of water.</li></ul> <p>Abandonment procedures shall include:</p> <ul style="list-style-type: none"><li>• Road blockage</li><li>• Stabilization of exposed cuts, fills, or sidecast.</li><li>• Grading or shaping of road or landing surfaces to provide dispersal of water.</li><li>• Pulling or shaping of cuts, fills, or sidecast to prevent sediment discharge or failure.</li><li>• Removal of crossings where feasible or provision of overflow channels to minimize fill erosion and prevent flow diversion.</li></ul>		<ul style="list-style-type: none"><li>• Guidelines and performance standards specified in “California Salmonid Stream Habitat Restoration Manual” must be followed.</li><li>• Road construction standards apply to road decommissioning.</li><li>• Inspect decommissioned roads both following the first storm producing bankfull stage and, again, prior to filing the completion report.</li><li>• The purpose of the inspection will be to verify the effectiveness of treatments in preventing sediment production and the restoration of natural drainage and hillslope stability.</li><li>• If treatments are found to be ineffective, further treatments will be applied if more sediment is prevented than produced by re-entry.</li></ul>						

Table 4 - Other Issues

Issues	Existing Forest Practice Rules (FPR)	Watersheds with Threatened or Impaired (T&I) Values	2112 Rules Proposal	WPRC Science Panel Report 6/15/99	Forest Ecosystem Management Assessment Team (FEMAT) - Option 9	Salmon and Steelhead Recovery Coalition Resolution (Aug. 2002)	North Coast RWQCB General WDRs (Order No. R1-2004-030)	North Coast RWQCB Categorical Waiver F (THPs) (Order No. R1-2004-016)	Coho Recovery Strategy (Alternatives B and C)
<u>Inner Gorge Treatment</u>		Special management zone established for inner gorge slopes >55% above a Class I WLPZ: <ul style="list-style-type: none"><li>• Zone extends to first break in slope or 300’ from edge of flood plain (Watercourse Transition Line [WTL]), whichever is less</li><li>• Prohibits use of evenaged regeneration harvesting</li><li>• All operations on slopes exceeding 65% to be reviewed reviewed by a professional Geologist</li></ul>	Same as T&I Rules.	Special zone established where slopes above WLPZ >55% <ul style="list-style-type: none"><li>• Zone extends to first break in slope or 300’ from edge of flood plain (Watercourse Transition Line [WTL]), whichever is less</li><li>• Requires use of selection harvesting</li><li>• Even-age management above zone on slope &gt;65% to be reviewed by geologist</li></ul> All slopes exceeding 65% in the zone reviewed by Certified Engineering Geologist	Included in Riparian Reserve <ul style="list-style-type: none"><li>• No harvest</li></ul>	Special zone established where inner gorge extends beyond a Class I and II WLPZ and slopes are >55% <ul style="list-style-type: none"><li>• Zone extends to first break in slope or<ul style="list-style-type: none"><li>• 300’ for Class I</li><li>• 200’ for Class II</li></ul></li><li>• from hillslope edge of channel zone , whichever is less</li><li>• Even-age management w/in zone is prohibited</li></ul>	.		Special management zone established for inner gorge slopes >55% above a Class II WLPZ: <ul style="list-style-type: none"><li>• Zone extends to first break in slope or 100’ from edge of WLPZ or 200’ from Watercourse Transition Line [WTL]), whichever is less</li><li>• Prohibits use of evenaged regeneration harvesting</li></ul> All operations on slopes exceeding 65% in the zone reviewed by a professional Geologist
<u>Headwall Swales</u>			Only selection or commercial thinning harvesting may be used. <ul style="list-style-type: none"><li>• Selection harvesting must maintain the diameter distribution present before harvesting.</li><li>• Thinning must retain dominant and codominant trees.</li></ul> All operations must be reviewed by a professional geologist.						Only selection or commercial thinning harvesting may be used. <ul style="list-style-type: none"><li>• Selection harvesting must maintain the diameter distribution present before harvesting.</li><li>• Thinning must retain dominant and codominant trees.</li></ul> All operations must be reviewed by a professional geologist.
<u>Bank Stability</u>	Application of WLPZ	Result in no decrease in stability of watercourse channel or of a watercourse or lake bank	Same as T&I Rules.	<ul style="list-style-type: none"><li>• Class I - CEG required for harvest on unstable area(s)</li><li>• Class III - No WLPZ req., retain all hardwoods w/in EEZ</li><li>• Geologist review required for harvest of slopes &gt;65% with WLPZ</li></ul>	No harvest in Riparian Reserve				Same as T&I Rules
<u>RMZ/WLPZ Soil Stabilization</u>	Class I/II - areas > 800 continuous sq. ft treated. Treat by Oct. 15, unless disturbed later, then treat w/in 10 days of creation, doesn’t apply to road surface	<ul style="list-style-type: none"><li>• For areas disturbed from May 1 to October 15, stabilize prior to any day if 30% chance of rain or by October 15<sup>1</sup></li><li>• For areas disturbed from October 16 to April 30, stabilize prior to 30% chance of rain or w/in 10 days.</li><li>• The traveled surface of logging roads treated to prevent generation of sediment and concentration of runoff at anytime.</li></ul>	Same as T&I Rules.						Same as T&I Rules
<u>RMZ/WLPZ Soil</u>		<ul style="list-style-type: none"><li>• Where the undisturbed natural</li></ul>							

CDF Matrix of Salmonid Protection Measures for Discussion at the Board of Forestry and Fire Protection Special Meeting  
August 23, 2006

Issues	Existing Forest Practice Rules (FPR)	Watersheds with Threatened or Impaired (T&I) Values	2112 Rules Proposal	WPRC Science Panel Report 6/15/99	Forest Ecosystem Management Assessment Team (FEMAT) - Option 9	Salmon and Steelhead Recovery Coalition Resolution (Aug. 2002)	North Coast RWQCB General WDRs (Order No. R1-2004-030)	North Coast RWQCB Categorical Waiver F (THPs) (Order No. R1-2004-016)	Coho Recovery Strategy (Alternatives B and C)
<b><u>Stabilization</u></b> (Continued)		ground cover cannot effectively protect beneficial uses of water, ground shall be treated by seeding, mulching, or replanting to retain and improve natural ability to filter sediment, minimize soil erosion, and stabilize banks of watercourses.							
<b><u>Harvest Restrictions on Unstable Areas</u></b>	Unstable areas must be identified in the THP. No heavy equipment may operate on such areas unless unavoidable and explained and justified.	RPF must identify active erosion sites and submit a remediation plan and schedule for remedy, if feasible	Same as T&I Rules.	Landowners should have geologist conduct a broad geologic review of the property  Geologist review required when road construction or harvesting is on unstable area	No harvest w/in Riparian Reserve			Timber harvest activities on all slides and unstable areas must retain at least 50% evenly distributed total overstory and understory canopy with a higher retention standard at the toe of the feature.  Timber harvest activities shall be accompanied by a geologic report prepared in conformance with California Geologic Note 45, and shall address increased risk of sediment delivery and recommendations for preventing or minimizing sediment discharge from these sites.	Same as T&I Rules
<b><u>Site Preparation</u></b>	Site preparation plan required in THP <ul style="list-style-type: none"><li>• No mechanical under saturated soil conditions</li><li>• Burning shall not fully consume larger organic debris for hillslope and watercourse bank stability</li><li>• Must comply with watercourse protection standards in rules</li></ul>	Site preparation activities that result in soil disturbance w/in or cause sediment movement into the channel of watercourses shall not be conducted.  Burn prescriptions designed to prevent loss of large woody debris in watercourses and vegetation and duff w/in a WLPZ, ELZ or EEZ.  Burn restrictions stated in the plan and the burn permit.	Same as T&I Rules.	<ul style="list-style-type: none"><li>• Minimize burning in Class III EEZ</li><li>• Limit mechanical to beginning of winter period</li><li>• Limit broadcast burning where feasible</li><li>• Require Site Preparation Completion Report</li></ul>					Same as T&I Rules
<b><u>Water Drafting</u></b>		Requires drafting plan  Prohibited if: <ul style="list-style-type: none"><li>• bypass flows are less than 2 cubic feet per second, or</li><li>• pool volume at the water drafting site would be reduced by 10%, or</li><li>• diversion rate exceeds 350 gallons per minute, or</li><li>• diversion rate exceeds 10% of the above surface flow;</li></ul> Intakes screened in Class I and Class II waters.	Same as T&I Rules						Same as T&I Rules

CDF Matrix of Salmonid Protection Measures for Discussion at the Board of Forestry and Fire Protection Special Meeting  
August 23, 2006

Issues	Existing Forest Practice Rules (FPR)	Watersheds with Threatened or Impaired (T&I) Values	2112 Rules Proposal	WPRC Science Panel Report 6/15/99	Forest Ecosystem Management Assessment Team (FEMAT) - Option 9	Salmon and Steelhead Recovery Coalition Resolution (Aug. 2002)	North Coast RWQCB General WDRs (Order No. R1-2004-030)	North Coast RWQCB Categorical Waiver F (THPs) (Order No. R1-2004-016)	Coho Recovery Strategy (Alternatives B and C)
<b>Water Drafting</b> (Continued)		Approaches to drafting locations w/in a WLPZ surfaced with rock or other suitable material to avoid generation of sediment.							
<b>Monitoring</b>	Active and post harvest inspections by State Agencies.	When operations proposed in WLPZ: <ul style="list-style-type: none"><li>• Post harvest monitoring program to determine the effectiveness of the prescribed practices as implemented</li></ul>	Same as T&I Rules.	RPF has “cradle to grave” responsibilities for the THP	Specific objectives derived from results of watershed analysis and tailored to the watershed. Two most important activities are impacts of timber harvest and road related operations. <ul style="list-style-type: none"><li>• Post project site review</li><li>• Reference sub-drainages</li><li>• Basin monitoring</li><li>• Water quality network</li><li>• Landscape integration of monitoring data</li></ul> Pooling of monitoring resources of federal and state agencies to provide consistency		Inspection plan and Reporting Requirements <ul style="list-style-type: none"><li>• Inspection Plan shall be designed to ensure that all required management measures (MMs) are installed and functioning prior to rain events, that MMs were effective in controlling sediment discharge sources throughout the winter period, and that no new controllable sediment discharge sources developed. Includes map of inspection sites.</li><li>• Qualified professionals inspection plan, shall conduct all specified inspections.</li><li>• Specifies minimum inspection frequency for winter and non-winter operations.</li><li>• Requires reporting and repair/mitigation of MM failures</li></ul>		<ul style="list-style-type: none"><li>• DFG to begin long-term monitoring program that measures implementation and effectiveness of FPRs for maintenance and recovery of coho habitat.</li><li>• CDF/MSG/CGS to develop monitoring program to evaluate whether mitigation implemented by RPFs are reducing risk of mass soil movement associated with harvesting operations.</li><li>• CDF to document voluntary efforts taken by landowners beneficial to coho that exceed FPRs and/or identified in CALWATER watershed recovery plans.</li><li>• DFG to develop system to evaluate implementation and effectiveness of voluntary efforts to recover coho populations.</li><li>• DFG to develop a long-term consolidation and analysis of resource assessments and monitoring data.</li><li>• CDF and BOF to work with DFG and others to establish a procedure for THPs to document and evaluate the implementation and effectiveness of coho-related mitigation measures prior to the official completion inspection by CDF and other agencies.</li><li>• DFG , in conjunction with CDF, landowners, and others, to monitor for at least 5 yrs the implementation of the FPRs.</li><li>• If results of monitoring show that implementation of the FPRs are not providing adequate protection for long-term survival of coho salmon, DFG in cooperation with CDF and others will develop recommendations to ensure adequate protection for long-</li></ul>

CDF Matrix of Salmonid Protection Measures for Discussion at the Board of Forestry and Fire Protection Special Meeting  
August 23, 2006

Issues	Existing Forest Practice Rules (FPR)	Watersheds with Threatened or Impaired (T&I) Values	2112 Rules Proposal	WPRC Science Panel Report 6/15/99	Forest Ecosystem Management Assessment Team (FEMAT) - Option 9	Salmon and Steelhead Recovery Coalition Resolution (Aug. 2002)	North Coast RWQCB General WDRs (Order No. R1-2004-030)	North Coast RWQCB Categorical Waiver F (THPs) (Order No. R1-2004-016)	Coho Recovery Strategy (Alternatives B and C)
									term survival of coho.
<u>Non-Concurrences</u>								No Non-Concurrence has been filed with CDF by NCRWQCB staff which was not resolved prior to the Project approval.	
<u>Wet Weather Operations</u>								With the exception of non-mechanized timber falling, fuels treatment such as hand piling and burning, hand fire line construction, or other activities which do not involve the use of heavy equipment or timber hauling, no timber harvest activities during measurable rain events (defined as greater than 1/4" in a 24-hour period). This measure does not apply to maintenance of existing roads and watercourse crossings.	
<u>Post-Harvest Stocking</u>								Post harvest stocking within the Project area shall comply with the uneven aged stoking requirements of the FPR(s) or in the case of even-aged harvesting methods shall maintain a canopy closure of at least 75% comprised of commercial species at least 30 feet in height.	
<u>Recovery Strategy</u>									<ul style="list-style-type: none"><li>• In watersheds with coho, DFG to prepare a "coho salmon biological assessment" when acting as lead or responsible agency under CEQA for timberland conservation activities, including, but not limited to the review of THPs.</li><li>• "Proof of Concept" pilot program to be developed and implemented to test scientific method of cumulative effects analysis as stated in 2001 "Dunne Report."</li><li>• DFG to collaborate with CDF and others to provide watercourse training and roads assessment (watershed academy).</li><li>• Acquire conservation easements or land in fee title from willing landowners to protect coho habitat.</li><li>• DFG to seek funding for staff to improve effectiveness of DFG</li></ul>
<u>Recovery Strategy</u> (Continued)									

CDF Matrix of Salmonid Protection Measures for Discussion at the Board of Forestry and Fire Protection Special Meeting  
August 23, 2006

Issues	Existing Forest Practice Rules (FPR)	Watersheds with Threatened or Impaired (T&I) Values	2112 Rules Proposal	WPRC Science Panel Report 6/15/99	Forest Ecosystem Management Assessment Team (FEMAT) - Option 9	Salmon and Steelhead Recovery Coalition Resolution (Aug. 2002)	North Coast RWQCB General WDRs (Order No. R1-2004-030)	North Coast RWQCB Categorical Waiver F (THPs) (Order No. R1-2004-016)	Coho Recovery Strategy (Alternatives B and C)
									<div>timberland conservation program.</div> <div><div><div></div></div><div>DFG to develop an information repository system for individual planning watersheds.</div><div><div><div></div></div><div>DFG to promote and support programmatic approaches to address key limiting factors in each planning watershed with a watershed plan.</div><div><div><div></div></div><div>DFG to develop and implement a program to design and implement a coho recovery plan for individual CALWATER planning watersheds.</div><div><div><div></div></div><div>DFG to provide technical expertise to support appropriate cooperatively undertaken recovery actions.</div><div><div><div></div></div><div>Government commitment of adequate financial, material, and personnel support for the life of the Recovery Strategy for on-the-ground recovery actions identified in the Recovery Strategy.</div></div></div></div></div></div>